## **LISTING OF CLAIMS**

- 1. (Currently Amended) A piston assembly, comprising:
  - a piston having a wrist pin bore;
  - a connecting rod having a wrist pin bore; and

a wrist pin receivable in said bores to connect said piston to said connecting rod, said wrist pin having an outer surface roughness no greater than <u>0.</u>10μm, a Kurtosis value that is inversely proportional to said surface roughness such that the product of said Kurtosis value and said surface roughness is between about 0.3μm to <u>0.</u>60μm, a skewness of about –1.0 to 0.0, and a lay angle relative to an axis of said wrist pin of 85 to 95 degrees.

- 2. (Original) The piston assembly of claim 1, wherein said wrist pin bores are bushingless and covered by a low friction coating.
- 3. (Original) The piston assembly of claim 2, wherein said low friction coating comprises manganese phosphate.
- 4. (Original) The piston assembly of claim 1, wherein said piston includes a piston body formed with said wrist pin bore and a piston skirt formed as one piece with said piston body of the same material.
- 5. (Currently Amended) A wrist pin for joining a connecting rod to a piston, said wrist pin comprising:

a generally cylindrical wrist pin body having a central longitudinal axis and a outer surface; and

wherein said outer surface is characterized by having an outer surface roughness of no greater than  $0.10\mu m$ , a Kurtosis valve value that is inversely proportional to the

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surface roughness such that the product of the Kurtosis valve and the surface roughness is between  $0.3\mu m$  and  $0.60\mu m$ , a skewness of about -1.0 to 0.0 and a lay angle relative to the axis of rotation of about 85 to 95 degrees.